

the first or second fluids of the first electrowetting prism and one of the first or second fluids of the second electrowetting prism, having a same refractive index, are close to each other.

7. The image acquisition apparatus of claim 6, wherein, when an interface between the first and second fluids in the first electrowetting prism is a first interface, and an interface between the first and second fluids in the second electrowetting prism is a second interface, the first interface and the second interface are parallel to each other.

8. The image acquisition apparatus of claim 1, wherein the optical path modulation optical element comprises at least one active liquid crystal element configured to shift the light according to an applied voltage.

9. The image acquisition apparatus of claim 8, wherein the active liquid crystal element comprises a first active liquid crystal element disposed along the traveling direction of the light and configured to refract the light according to the applied voltage.

10. The image acquisition apparatus of claim 8, wherein the active liquid crystal element comprises first and second active liquid crystal elements disposed to be spaced apart from each other along the traveling direction of the light and configured to shift the light according to the applied voltage.

11. The image acquisition apparatus of claim 8, wherein the active liquid crystal element comprises at least one of a hologram-type liquid crystal element and a beam-steering liquid crystal element.

12. The image acquisition apparatus of claim 1, further comprising a main lens,

wherein the optical path modulation optical element is located between the main lens and the color filter.

13. The image acquisition apparatus of claim 12, further comprising a microlens array between the main lens and the color filter to acquire information of the image corresponding to each direction.

14. The image acquisition apparatus of claim 13, wherein the optical path modulation optical element is located between the main lens and the microlens array to entirely cover the microlens array.

15. The image acquisition apparatus of claim 13, wherein the optical path modulation optical element is located between the microlens array and the color filter, and

an array of a plurality of optical path modulation optical elements is provided to one-to-one correspond to microlenses in the microlens array.

16. The image acquisition apparatus of claim 1, wherein the color filter comprises at least one of a two-dimensional (2D) arrangement of color filter element basic units, each including two green filter elements, one blue filter element, and one red filter element arranged in a Bayer pattern, a 2D arrangement of color filter element basic units, each including one red filter element, one green filter element, one blue

filter element, and one white element, a 2D arrangement of color filter element basic units, each including one red filter element, one green filter element, and one blue filter element, a 2D arrangement of color filter element basic units, each including one yellow filter element, one magenta filter element, one cyan filter element, and one white element, and a 2D arrangement of color filter element basic units, each including one yellow filter element, one magenta filter element, and one cyan filter element.

17. The image acquisition apparatus of claim 16, wherein, in response to the image shifted by the optical path modulation optical element having a position change amount of p , the optical path modulation optical element is configured to acquire the image information for each color from a plurality of positions in the time division manner by shifting the image by p in at least one of x-axial and y-axial directions, and

the signal processor is configured to obtain the color image by combining the image information for each color, which has been acquired from the plurality of positions in the time division manner.

18. An image acquisition method comprising:

electrically controlling an optical path modulation optical element to shift an incident position of an image on a color filter on which a plurality of types of color filter elements are arranged;

acquiring image information for each color by detecting, in pixel units, light which has passed through the color filter by using a photoelectric conversion cell array;

acquiring, in a time division manner, image information for each color from a plurality of positions by using the photoelectric conversion cell array while changing a position of the image on the color filter at least once by using optical path modulation according to the electrical control of the optical path modulation optical element; and

acquiring a color image by combining the image information for each color which is acquired in the time division manner from the plurality of positions.

19. The image acquisition method of claim 18, wherein the optical path modulation optical element is configured to shift the incident position of the image on the color filter in one pixel unit.

20. The image acquisition method of claim 18, wherein, in response to the image shifted by the optical path modulation optical element having a position change amount of p , the image information for each color is acquired from a plurality of positions in the time division manner by shifting the image by p in at least one of x- and y-axial directions by using the optical path modulation optical element, and

the color image is acquired by combining the acquired image information.

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